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EXAMINER

ALI, FARHAD

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/748,655	Applicant(s) NEVILL-MANNING ET AL.	
	Examiner FARHAD ALI	Art Unit 2146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Goodman (US 5,999,929 A).

Goodman teaches:

Claim 1

A method comprising:

receiving a first uniform resource locator (URL) including one or more parameters (**Column 5 Lines 1-4, “the spider 14 uses URLs to identify Web pages to be retrieved for analysis”**);

retrieving content corresponding to the first URL (**Column 5 Lines 5- “After the spider 14 receives a Web page for analysis, it caches the Web page locally within the link referral system”**);

retrieving content corresponding to a plurality of URLs having different parameter combinations of the one or more parameters; identifying a parameter

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combination from the plurality of URLs that corresponds to content that is approximately the same as the content corresponding to the first URL; and generating one or more URL rewrite rules based on the identified parameter combination **(Column 7-8 Lines 24-53, “In generating the URL re-write rules, the Web page analyzer 15 generally processes the URL from the outward most portions of the respective World Wide Web addresses, eliminating portions of the respective series, as defined by the separators, to determine candidate URLs. For the illustrative URL above, HTTP://www.netscape.com/ index.html”, candidate URLs will generally include, for example, eliminating portions from the beginning of the World Wide Web address”)**.

Claim 2

The method of claim 1, where the different parameter combinations include the first URL with no parameters, the first URL with each of the one or more parameters individually, and the first URL with combinations of the one or more parameters **(Column 7 Lines 24-28, “In generating the URL re-write rules, the Web page analyzer 15 generally processes the URL from the outward most portions of the respective World Wide Web addresses, eliminating portions of the respective series, as defined by the separators, to determine candidate URLs”, and also see Column 7 Lines 28-50)**.

Claim 3

The method of claim 1, further comprising:

performing the receiving a first URL, retrieving content corresponding to the first URL, retrieving content corresponding to the plurality of URLs, and identifying the parameter combination, for multiple different first URLs that each include the one or more parameters; and

generating the one or more URL rewrite rules for the identified parameter combinations for each of the first URLs **(See Claim 1 rejection)**.

Claim 4

The method of claim 3, where the rewrite rules specify that parameters that do not occur in a threshold number of the identified parameter combinations are to be removed **(Column 8 Lines 30-33, “After generating the score, the Web page analyzer 15 will store the candidate re-write rule in the URL re-write rulebase 16B if the score is below a predetermined threshold value”)**.

Claim 5

The method of claim 1, wherein each rewrite rule applies to a particular web site or web host **(Column 5 Lines 17-21, “To assist in the duplicate Web page consolidation operation, the Web page analyzer 15 develops the URL re-write rulebase 16B, which contains rules which are used by the Web page analyzer 15 to convert URLs to respective canonical forms”)**.

Claim 6

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The method of claim 1, where the identified parameter combination includes a minimum number of parameters **(Column 7 Lines 40-50, examples show removing portions from the “beginning” and “end” of the World Wide Web address without ever actually removing the first unique part of the URL).**

Claim 7

A method for converting a uniform resource locator (URL) into a canonical form of the URL, the method comprising:

receiving a URL that refers to content and that includes a parameter set including at least one parameter **(Column 5 Lines 1-4, “the spider 14 uses URLs to identify Web pages to be retrieved for analysis”);**

determining a rewrite rule by receiving a plurality of URLs that include the parameter set and identifying parameters in the parameter set that do not contribute to content **(Column 7-8 Lines 24-53, “In generating the URL re-write rules, the Web page analyzer 15 generally processes the URL from the outward most portions of the respective World Wide Web addresses, eliminating portions of the respective series, as defined by the separators, to determine candidate URLs. For the illustrative URL above, HTTP://www.netscape.com/ index.html”, candidate URLs will generally include, for example, eliminating portions from the beginning of the World Wide Web address”);**

applying the rewrite rule to the URL by removing the parameters that do not contribute to content from the URL; and outputting the rewritten URL as the canonical

form of the URL (Column 5 Lines 17-21, "To assist in the duplicate Web page consolidation operation, the Web page analyzer 15 develops the URL re-write rulebase 16B, which contains rules which are used by the Web page analyzer 15 to convert URLs to respective canonical forms").

Claim 9

The method of claim 7, where the identifying parameters in the parameter set that do not contribute to content includes; retrieving content corresponding to a sampled URL including a combination of parameters in the parameter set; and identifying the combination of parameters as corresponding to retrieved content, where the retrieved content is approximately the same as another retrieved content corresponding to another combination of parameters that includes a reduced number of parameters (Column 8 Lines 1-9, "If the Web page analyzer 15 determines in step 2b that the URLs in the entry are not identical to each other, it (that is, the Web page analyzer 15) find the shortest substitution rule that textually rewrites the longer URL into the shorter URL. For example, the shortest rule to change http://www.netscape.com/index.html" to HTTP://netscape.com/index.html" is to replace "www." with "" (that is, delete "www."). This rule is now a "candidate" rewrite rule").

Claim 10

The method of claim 9, where the combination of parameters includes at least one of the sampled URL with no parameters, the sampled URL with

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individual parameters, or the sampled URL with combinations of the at least one parameter **(Column 7 Lines 24-28, “In generating the URL re-write rules, the Web page analyzer 15 generally processes the URL from the outward most portions of the respective World Wide Web addresses, eliminating portions of the respective series, as defined by the separators, to determine candidate URLs”, and also see Column 7 Lines 28-50).**

Claim 11

The method of claim 7, where the rewrite rule applies to a particular web site or web host **(Column 5 Lines 17-21, “To assist in the duplicate Web page consolidation operation, the Web page analyzer 15 develops the URL re-write rulebase 16B, which contains rules which are used by the Web page analyzer 15 to convert URLs to respective canonical forms”).**

Claim 12

One or more devices comprising:

at least one fetch bot configured to download content on a network from locations specified by uniform resource locators (URLs) **(Column 4 Lines 60-65, “spider”);**

a content manager configured to extract URLs from the downloaded content **(Column 5 Lines 5-10, “Web page analyzer”);**

a rewrite component configured to receive a URL that refers to content and that includes a parameter set including at least one parameter, apply a predetermined rewrite rule to the URL that removes the at least one parameter from the URL when the at least one parameter does not affect the content referred to by the URL, where the predetermined rewrite rule is determined by receiving a plurality of URLs that include the parameter set and identifying parameters in the parameter set that do not contribute to content; and output the rewritten URL as the canonical form of the URL **(Column 5 Lines 17-21, “To assist in the duplicate Web page consolidation operation, the Web page analyzer 15 develops the URL re-write rulebase 16B, which contains rules which are used by the Web page analyzer 15 to convert URLs to respective canonical forms”);** and a URL manager configured to store the canonical form of the URL **(Column 5 Lines 30-33, “The Web page analyzer 15 stores information regarding the identifications for the various classes and the Web page assignment information in the link class database 17”).**

Claim 14

The one or more devices of claim 12, where the identifying parameters in the parameter set that do contribute to content includes; retrieving content corresponding to a sampled URL including a combination of parameters in the parameter set; and identifying the combination of parameters as corresponding to retrieved content, where the retrieved content is approximately the same as another retrieved content corresponding to another combination of parameters that includes a reduced number of parameters **(Column 8 Lines 1-9, “If the Web page analyzer 15**

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determines in step 2b that the URLs in the entry are not identical to each other, it (that is, the Web page analyzer 15) find the shortest substitution rule that textually rewrites the longer URL into the shorter URL. For example, the shortest rule to change `http://www.netscape.com/index.html` to `"HTTP://netscape.com/index.html"` is to replace `"www."` with `""` (that is, delete `"www."`). This rule is now a "candidate" rewrite rule").

Claim 15

The one or more devices of claim 14, where the combination of parameters includes at least one of the sampled URL with no parameters, the sampled URL with individual parameters, or the sampled URL with combinations of the at least one parameter (**Column 7 Lines 24-28, "In generating the URL re-write rules, the Web page analyzer 15 generally processes the URL from the outward most portions of the respective World Wide Web addresses, eliminating portions of the respective series, as defined by the separators, to determine candidate URLs", and also see Column 7 Lines 28-50).**

Claim 16

The one or more devices of claim 12, where each rewrite rule applies to a particular web site or web host (**Column 5 Lines 17-21, "To assist in the duplicate Web page consolidation operation, the Web page analyzer 15 develops the URL re-write rulebase 16B, which contains rules which are used by the Web page analyzer 15 to convert URLs to respective canonical forms"**).

Claim 17

A system comprising:

means for receiving a first uniform resource locator (URL) including one or more parameters (**Column 5 Lines 1-4, “the spider 14 uses URLs to identify Web pages to be retrieved for analysis”**);

means for retrieving content corresponding to the first URL (**Column 5 Lines 5-“After the spider 14 receives a Web page for analysis, it caches the Web page locally within the link referral system”**);

means for retrieving content corresponding to a plurality of URLs having different parameter combinations of the one or more parameters; means for identifying the parameter combination from the plurality of URLs that corresponds to content that is approximately the same as the content corresponding to the first URL and that contains a minimum number of parameters generating one or more URL rewrite rules based on the identified parameter combination (**Column 7-8 Lines 24-53, “In generating the URL re-write rules, the Web page analyzer 15 generally processes the URL from the outward most portions of the respective World Wide Web addresses, eliminating portions of the respective series, as defined by the separators, to determine candidate URLs. For the illustrative URL above, HTTP://www.netscape.com/ index.html”, candidate URLs will generally include, for example, eliminating portions from the beginning of the World Wide Web address”**); and

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means for generating one or more URL rewrite rules based on the identified parameter combination (**Column 5 Lines 17-21, “To assist in the duplicate Web page consolidation operation, the Web page analyzer 15 develops the URL re-write rulebase 16B, which contains rules which are used by the Web page analyzer 15 to convert URLs to respective canonical forms”).**

Claim 18

A computer-readable memory device including programming instructions executed by a processor, the programming instructions comprising:

instructions for receiving a first uniform resource locator (URL) including one or more parameters (**Column 5 Lines 1-4, “the spider 14 uses URLs to identify Web pages to be retrieved for analysis”**);

instructions for retrieving content corresponding to the first URL (**Column 5 Lines 5- “After the spider 14 receives a Web page for analysis, it caches the Web page locally within the link referral system”**);

instructions for retrieving content corresponding to a plurality of URLs having different parameter combinations of the one or more parameters; instructions for identifying the parameter combination from the plurality of URLs that corresponds to content that is approximately the same as the content corresponding to the first URL and that includes a minimum number of parameters (**Column 7-8 Lines 24-53, “In generating the URL re-write rules, the Web page analyzer 15 generally processes the URL from the outward most portions of the respective World Wide Web**

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addresses, eliminating portions of the respective series, as defined by the separators, to determine candidate URLs. For the illustrative URL above, HTTP://www.netscape.com/ index.html", candidate URLs will generally include, for example, eliminating portions from the beginning of the World Wide Web address"); and

instructions for generating one or more URL rewrite rules based on the identified parameter combination **(Column 5 Lines 17-21, "To assist in the duplicate Web page consolidation operation, the Web page analyzer 15 develops the URL re-write rulebase 16B, which contains rules which are used by the Web page analyzer 15 to convert URLs to respective canonical forms")**).

Claim 19

The system of claim 17, where the parameter combination comprises one of the first URL with no parameters, the first URL with each of the one or more parameters individually, or the first URL with combinations of the one or more parameters **(Column 7 Lines 24-28, "In generating the URL re-write rules, the Web page analyzer 15 generally processes the URL from the outward most portions of the respective World Wide Web addresses, eliminating portions of the respective series, as defined by the separators, to determine candidate URLs", and also see Column 7 Lines 28-50)**.

Claim 20

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The computer-readable memory device of claim 18, where the instructions for receiving a first URL, the instructions for retrieving content corresponding to the first URL, the instructions for retrieving content corresponding to a plurality of URLs, and the instructions for identifying the parameter combination are performed for multiple first URLs, each first URL including the one or more parameters **(See claim 18 rejection)**, and where the one or more URL rewrite rules specify that parameters that do not occur in a threshold number of the identified parameter combinations are to be removed **(Column 8 Lines 30-33, “After generating the score, the Web page analyzer 15 will store the candidate re-write rule in the URL re-write rulebase 16B if the score is below a predetermined threshold value”)**.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FARHAD ALI whose telephone number is (571)270-1920. The examiner can normally be reached on Monday thru Friday, 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey C. Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Farhad Ali/
Examiner, Art Unit 2146

/Jeffrey Pwu/
Supervisory Patent Examiner, Art Unit 2146